

Recombinant Anti-CD3 $\gamma\epsilon$ Antibody (V3S-0522-YC3177)

Cat. No.: V3S-0522-YC3177

Summary

Description	This product is a monoclonal antibody derived from Mouse (<i>Mus musculus</i>), which can specifically recognize CD3 $\gamma\epsilon$ complex. The antibody is expressed with mammalian cell transient expression system, serum-free and purified by affinity chromatography. The purity and integrity are tested via SDS-PAGE and SEC-HPLC analysis. Given an antigen, additional QC measures are also desired such as affinity testing and binding validation. Specifically, the antibody is provided in multiple formats for in vivo and in vitro assays. The <i>In vivo</i> version features greater than 95% purity, ultra-low endotoxin levels (<1 EU/mg or 0.1 EU/mg), and is preservative, stabilizer, and carrier protein-free.
Clonality	Monoclonal
Host Species	Mouse
Target Species	Human
Affinity	KD = 2.75 nM, determined by surface plasmon resonance.
Isotype	IgG
Isotype Control	C35500
Secondary Antibody	C47504; C37557; C41360; C32672; C10001; C13172; C32251; C50005

Property

Expression Species	HEK293F or CHO
Conjugation	None
Purity	>95%, determined by SDS-PAGE and/or SEC-HPLC
Endotoxin	<1 EU/mg, determined by LAL method
Purification	Protein A affinity purified
Sterility	0.2 μ M filtered
Formulation	PBS, pH 7.4
Preservation	No preservatives
Stabilizer	No stabilizers
Storage	Store at 4°C within a week. For longer storage, aliquot and store at -20°C.

For lab research use only, not for diagnostic, therapeutic or any *in vivo* human use.

Applications

Application	ELISpot; FC
Application Notes	The antibody is recommended for detection of CD3 $\gamma\epsilon$ by ELISpot, FC assays.

Target

Target	CD3 $\gamma\epsilon$
Alternative Name	cluster of differentiation 3
Introduction	The T cell receptor (TCR) performs the dual role of antigen recognition and signal transduction in T cell immune responses and plays an important role in viral infections, cancer, inflammation, and autoimmunity. The TCR lacks intracellular signaling domains but interacts with the CD3 $\delta\epsilon$, CD3 $\gamma\epsilon$, and CD3 $\zeta\zeta$ subunits, each of which possess intracellular immunoreceptor tyrosine-based activation motifs (ITAMs) for phosphorylation. The FG loop in TCR C β and the DE loop in TCR C α have been shown to interact with CD3 $\gamma\epsilon$ and CD3 $\delta\epsilon$, respectively, whereas the CC' loop in TCR C β has been found to interact with both CD3 $\gamma\epsilon$ and CD3 $\delta\epsilon$.
Research Area	Immunology

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